

LEGAL ORIENTATION PROGRAM (LOP)

Evaluation, Performance and Outcome
Measurement Report, Phase III:
The Role of LOP in Affecting Case Processing Times

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1. Introduction

Since 2005, the Executive Office for Immigration Review (EOIR) has contracted with the Vera Institute of Justice (Vera) to manage the Legal Orientation Program (LOP). As part of the contract, Vera subcontracts to nonprofit organizations to provide LOP services in local immigration detention facilities, while Vera staff monitor, oversee, and measure the performance of the program. Vera also agreed to evaluate the LOP to determine its impact on the immigration court and detention system, and the significance and extent of any impact. This evaluation has been carried out in three phases.

In Phase I, Vera analyzed immigration court case data for six years (2000-2005), using data aggregated in a variety of ways to examine trends and patterns over time and across courts. For example, cases were initially grouped based on the quarter in which their initial Master Calendar Hearing occurred. These quarterly groups were then sorted into subgroups in order to examine a number of issues pertaining to program performance, for instance, relief sought, representation, case outcomes, and case processing times. In our research, case processing time, defined as the duration of time between the initial Master Calendar Hearing and the last hearing when a case decision was made by an immigration judge before appeal, has been a continuing and central interest because of its relevance to matters of justice and court efficiency.¹

A critical interest of the Phase I research was the degree to which the presence of and exposure to LOP services influenced immigration court cases. So, for example, when we looked earlier at relief sought, we examined the types of relief application filed for cases with an initial Master Calendar Hearing in each quarter from 2000 to 2005. The total number of relief applications of each type in each quarter was then plotted for the six years. This approach allowed us to identify trends in relief applications over these years and to study these trends in relation to other aggregate trends.

Among several interesting trends observed, one that we wanted to explore further was that while case processing times have decreased for cases concluded in detention nationwide, they have been decreasing at slightly faster rates for cases that began at hearing locations served by the LOP. However, these aggregate analyses did not allow us to look at differences between cases with and without LOP services at an individual-case level. In other words, although we could examine the extent to which the aggregate measure of case processing time changed over time, both in sites served by LOP providers and those not served, we did not have sufficient information to determine whether LOP services were causing these changes. Hence, Phase II was designed.

In Phase II, we analyzed individual case-level immigration court data for cases with an initial Master Calendar Hearing occurring in 2006. We found that LOP cases had

¹ By not using appeal date to calculate case processing time, we do not presume that appeal is not relevant, but in the analysis we wanted to look only at time spent in pre-appeal before immigration judges so as to avoid comparing cases on appeal with those that did not involve an appeal. In a limited number of cases, the Immigration Judge issued a decision after the last hearing. In those instances, we used the decision date as the end of the case.

shorter processing times overall. On average, LOP cases took 27 days in immigration court whereas cases without LOP services took 40 days, a difference of 13 fewer days for LOP cases. We then looked at case processing times in relation to the type of relief application sought, representation status, and custody status at the time of completion. Those cases with LOP services took less time than comparison cases across almost every type of relief application, with the exception of applications for Voluntary Departure but no substantive relief. However, for released cases, the pattern of case processing times was reversed: LOP cases took longer than comparison cases across almost every type of relief application irrespective of whether there was representation. One possible explanation suggested by LOP providers and stakeholders is that LOP cases take longer upon release because LOP participants with complicated cases are better informed of the value of obtaining representation and, consequently, are requesting more time to find representation upon release.

Overall, these findings preliminarily point to a relationship between participation in LOP and *shorter* case processing times *while respondents are in detention* and longer case processing times upon *release from detention*. It appears then that the LOP might influence case processing times.² However, it is also possible that other factors play a part in this relationship, either as independent influences or in combination with LOP. For example, it might be possible that LOP participants went to court at places where all cases move more quickly than the national averages. It might also be possible that more LOP participants were statutorily ineligible for any type of relief and could only be ordered removed.

Despite the differences in case-processing times between LOP and comparison cases observed in Phase II, those analyses did not allow us to examine whether LOP services contributed to these differences. This is because we looked at different, potentially influential factors *one at a time*. That meant we were not able to sort out their relative influences. In other words, comparisons were made between case processing times for LOP and non-LOP cases *without controlling for other factors that might influence these times*, such as charges and immigration judges. Furthermore, in Phase II, we looked only at completed cases, a methodological weakness because these cases may differ in important ways from ongoing cases, leading to a distorted picture of what actually influences the timing of case processing.

Phase III is designed to examine in much greater depth than before the relationship between the LOP and case processing times, taking into account other factors that might influence these times. We used more sophisticated analytical techniques to examine whether LOP is associated with a reduction in case processing time, controlling for the effect of other relevant factors. In the following sections, we first review prior research on case processing times in other types of courts. This review sets the stage for the next section, which lays out the research plan of the present study. The final section presents the analyses, findings, and conclusions. Overall, the analyses found that:

² For detailed information about our findings, see *Legal Orientation Program: Evaluation and Performance and Outcome Measurement Report, Phase II*, http://www.vera.org/publication_pdf/475_874.pdf.

- More LOP cases (59 percent) than non-LOP cases (53 percent) concluded at the first Master Calendar Hearing; and
- Of the cases that continued after the first Master Calendar Hearing with the respondent in detention throughout, the median case processing time until the conclusion of LOP cases was 11 days less than the median case processing time for non-LOP cases, a difference confirmed by other, more sophisticated statistical analyses.

2. Prior Research on Court Case Processing Times

In this section, we discuss the achievements and limitations of prior studies on court case processing times, including their research designs, case selection and sampling procedures, data sources, measures, and statistical techniques.

The immigration court system is a relatively new institution, created in 1983, replacing a hearing examiner system at the former Immigration and Naturalization Service, to hear what were then called deportation and exclusion cases but which are now known as removal cases. Because of its relatively brief history, not surprisingly, we have not found rigorous prior research focused on case processing times of immigration court cases. Previous studies on court case processing time have focused on civil or criminal cases with an even narrower focus on court delays. Empirical research on civil case delay dates to the 1950s.³ Research on criminal case delays began to appear somewhat later, in the closing years of the 1970s.⁴

Historically, greater attention was paid to the outcomes than to the processing of court cases. In the late 1960s, the number of crimes nationwide increased substantially, leading to increasing criminal court caseloads across the country. As a result, court delays became a major concern for litigants, legislators, and the general public. Many court-delay-reduction programs were launched and, to gauge their impacts, evaluation programs were also launched. Studies of court delays tended to focus on the “pace of litigation,” what is now commonly called case processing time. The operational definition of case processing time has varied, depending on the procedural start and end

³ For example:

Rosenberg, M. and Sovern, M. I. “Delay and the Dynamics of Personal Injury Litigation,” *Columbia Law Review*, 59 (1959), 1115.

⁴ For example:

Luskin, M. L., “Building a Theory of Case Processing Time,” *Judicature*, 62 (1978), 115.

Church, T. W., Jr. et al., *Justice Delayed: The Pace of Litigation in Urban Trial Courts*. Williamsburg, VA: National Center for State Courts, 1978.

Hausner, J. and Seidel, M., *An Analysis of Case Processing Time in the District of Columbia Superior Court*. Washington, D.C.: Institute for Law and Social Research, 1979.

Neubauer, D. W., “Improving the Analysis and Presentation of Data on Case Processing Time,” *The Journal of Criminal Law & Criminology*, 74 (1983), 1589.

Zatz, M. S. and Lizotte, A. J., “The Timing of Court Processing: Towards Linking Theory and Method,” *Criminology*, 23 (1985), 313.

Luskin, M. L. and Luskin, R. C., “Why So Fast, Why So Slow?: Explaining Case Processing Time,” *The Journal of Criminal Law & Criminology*, 77 (1986), 190.

points. Some studies defined case processing time as the time it took to move a case from arrest to disposition by guilty plea, trial, or dismissal.⁵ Other studies defined case processing time as the “time under the control of the trial court.”⁶

Despite the paucity of directly pertinent research, the earlier studies provided helpful guidance about ways to handle this project’s research challenges. The prior studies promoted disciplined thinking about how to best design our research with regard to subject selection and sampling, data availability, research design, and statistical techniques.

Prior Research Designs

Variables: Prior quantitative research concentrated on the characteristics of cases, defendants, and courts when studying factors possibly influencing court case processing time. These variables included, among others, the seriousness and complexity of the case, the type of offense triggering the court process, the number of motions filed, the pretrial status of the defendant (detained or released), defendant resources, such as the type of legal representation, the mode of disposition, and court caseloads.⁷ Some studies used qualitative field-based approaches to study the social and political dynamics of court systems.⁸

Findings: The studies reported that a range of characteristics were associated with case processing time. For example, Luskin and Luskin found that felony-case processing times were related to participants’ incentives for desiring fast or slow case processing, case complexity, case-event sequences, court structure, court efficiencies, and court caseload.⁹ A number of studies found that the more serious and more complicated cases took longer to process.¹⁰ Studies also reported that defendants might elect to speed up or delay their cases if there were tangible benefits for doing so.¹¹ Although one might expect as a general rule for defendants to prefer that their cases be concluded quickly, in fact

⁵ Zatz and Lizotte, 1985.

Luskin and Luskin, 1986.

Luskin and Luskin, “Case Processing Times in Three Courts,” *Law & Policy*, 9 (1987), 207.

⁶ Ryan, J. P. et al., “Analyzing Court Delay-Reduction Programs: Why Do Some Succeed ?” *Judicature*, 65 (1981), 58.

⁷ Hausner and Seidel, 1979.

Church, T. W., Jr., “Who Sets the Pace of Litigation in Urban Trial Courts?” *Judicature*, 65 (1981), 76.

Luskin and Luskin, 1986.

Luskin & Luskin, 1987.

Ostrom, B. J. and Hanson, R. A., “Efficiency, Timeliness, and Quality: A New Perspective From Nine State Criminal Trial Courts,” *NIJ Research in Brief*, June 2000.

⁸ Ryan et al., 1981.

Neubauer, D. W. and Ryan, J. P., “Criminal Courts and the Delivery of Speedy Justice: the Influence of Case and Defendant Characteristics,” *The Justice System Journal*, 7 (1982), 213.

Ostrom and Hanson, 2000.

⁹ Luskin and Luskin, 1986; Luskin & Luskin, 1987.

¹⁰ Hausner and Seidel, 1979; Church, 1981; Luskin and Luskin, 1986; Luskin & Luskin, 1987; Ostrom and Hanson, 2000.

¹¹ Grossman et al., “Measuring the Pace of Civil Litigation of Federal and State Trial Court,” *Judicature*, 65 (1981), 86.

Zatz and Lizotte, 1985.

there are important reasons why this might not be so. Some defendants prefer to have their cases prolonged in order to buy time to better prepare their defenses or for other reasonable purposes, for example, personal or familial obligations. Cases also move faster for defendants who are in custody.¹² Detention time is another factor that is thought to influence case processing time: defendants who have been detained for a long time might wish to have their cases concluded more quickly in order to hasten their release from custody.¹³

Findings sometimes varied across these early studies. For example, one study found that the defendant's race and jail status were related to case processing time: blacks and jailed defendants were processed more quickly than their white and non-jailed counterparts.¹⁴ Another study, however, did not find that race affected case processing times.¹⁵ The study also found that age, but not gender, contributed to the timing of case completion. Another study found that case processing time was influenced more by court incentive structures, such as calendaring, than by other factors.¹⁶

The selection of the factors just mentioned is partly due to the studies' data limitations. In case-processing-time studies, court administrative data is a common source of information. Most studies in this area did not collect original data. Perhaps, at the time they were done, there were few incentives to expend the substantial resources needed to collect original information.

Sometimes studies were limited by their research designs. This might be partly due to lack of resources because the most rigorous (experimental) designs are often infeasible and, even if practically possible, are time and cost consuming. Most studies did not introduce comparison groups that could illuminate how the presence of different client, case, and court characteristics affected case processing times. In effect, they did not use a comparative design along with suitable control variables. Although some studies compared case processing times across different jurisdictions,¹⁷ no independent variables were introduced to explain observed differences. Some other studies used a pre-/post-design format, comparing case processing times before and after a court-delay reduction program was introduced. For example, one study examined case-processing times in four different courts for a sample of criminal cases one year prior to the introduction of the delay-reduction program and one year afterward.¹⁸ This allowed for the examination of general trends over time but not for a comparison among cases

¹² Swigert and Farrell, "Speedy Trial and the Legal Process," *Law and Human Behavior*, 4 (1980), 135. Luskin and Luskin, 1987.

¹³ Zatz and Lizotte, 1985.

¹⁴ Swigert and Farrell, 1980.

¹⁵ Neubauer and Ryan, 1982.

¹⁶ Flanders, S., "Modeling Court Delay," *Law & Policy Quarterly*, 2 (1980), 305.

¹⁷ Jacob, et al., "Keeping Pace: Court Resources and Crime in Ten U.S. Cities," *Judicature*, 66 (1982), 73. Neubauer and Ryan, 1982.

Klemm, M. F., "A Look at Case Processing Time in Five Cities," *Journal of Criminal Justice*, 14 (1986), 9. Luskin and Luskin, 1987.

Ostrom and Hanson, 2000.

¹⁸ Ryan et al., 1981.

grouped in specific ways, for example, by crime type and the defendants' personal and criminal-career characteristics. In other words, potentially relevant influences were not held constant for the periods before and after the program was introduced.

Prior Data Sources and Measures

Previous studies of court case processing time examined the effects of numerous variables relating to the case, defendant, and court characteristics. Understandably, the pool of cases and related descriptive and explanatory variables selected for examination were shaped by the available data sources. Case samples for studies about case processing times have usually been drawn from case records maintained by the courts. These data were readily accessible, and researchers do not have to invest their usually limited resources in original data collection. However, such data have their disadvantages as well. First, they might not be appropriate or the most suitable for every kind of study of case processing time. Some early researchers expressed their concerns precisely about the lack of appropriate data.¹⁹ For instance, information about the courts in which the cases had been processed was often unavailable or inaccessible. Sometimes information about the court system is unknown. A researcher might find that his/her theories cannot be properly examined based on this kind of administrative data. Some researchers found that they could not get all desired information about the case or defendant in court records for their study.²⁰ Second, even when administrative data were available, it was sometimes of poor or suspect reliability.²¹ In response to the unavailability of clearly defined and reliable data, Luskin,²² for one, suggested to court administrators how they might better describe and analyze case processing times in criminal cases. Third, by focusing and relying almost exclusively on court data, researchers limited their ability to gather other information potentially relevant to understanding case processing times

Prior Case Selection and Sampling

One similarity found in most previous studies is that they included only disposed cases in their analysis when examining case processing times. By including only disposed cases, the researcher is selecting cases with shorter processing times. This is because, by definition, cases that are not yet disposed will have longer case processing times than those that have been disposed. Not including these longer case-processing times, therefore, reduces estimates of case processing time. In a nutshell, cases that are still open might be so for reasons that are important to understanding the timing of case completion. Omitting such cases could unduly emphasize factors related to faster case completion.²³

¹⁹ Zatz, M. S. and Lizotte, A. J., "The Timing of Court Processing: Towards Linking Theory and Method," *Criminology*, 23 (1985), 313.

²⁰ Neubauer and Ryan, 1982.

²¹ Ibid.

²² Luskin, 1981.

²³ Observations of case times with cases that were not completed or had lengthy processing time excluded can appropriately be used, however, for an exploratory research purpose. They can suggest bigger patterns that might provide directions for future studies, just as we have used Phase II of this study to inform the research performed in Phase III.

Another type of potential case-selection bias that has been pointed out involves excluding cases with lengthy processing times (“outliers”).²⁴

Prior Statistical Techniques Used

Prior researchers expressed concern over the lack of robust analytical techniques and relevant and reliable data, which posed formidable obstacles to the rigorous analysis of case processing times.²⁵ For example, some studies used simple statistics involving just two variables to describe the association between case and defendant characteristics and case processing times.²⁶ Other studies used ordinary multiple regression techniques²⁷ to examine the relationship between a single dependent variable, such as case processing time, and multiple explanatory variables. Some studies did not take into account possible ways in which variables might combine to produce effects that varied in unusual ways depending upon the subgroup of cases involved.

However, statistics involving just two variables and ordinary multiple regression techniques are not suited to the analysis of data involving a time-based dependent variable like case processing times that includes non-completed cases. As one researcher rightly observed, the “individual, irregular, and unpredictable nature of case processing” and, we might add, the practical limitations of data collection make it a challenging subject for traditional statistical models.²⁸ As the field progressed, a number of researchers correctly recognized these limitations and opted to use more suitable techniques that were emerging, known as event history (or alternatively, survival, failure time, or reliability) analysis.

Grossman et al²⁹ and Zatz and Lizotte³⁰ both used event history analysis to analyze court-case processing times. Grossman et al analyzed only cases disposed of during one calendar year, which, unfortunately did not exploit one of the singular advantages of event history analysis.³¹ Zatz and Lizotte, on the other hand, did include cases without a court disposition at the time of analysis, thereby avoiding biasing their findings in the ways described above that result from the inclusion of only completed cases.³²

²⁴ Neubauer, 1983.

²⁵ Zatz and Lizotte, 1985.

²⁶ Neubauer and Ryan, 1982; Neubauer, 1983.

²⁷ Multiple regression analysis is a statistical technique for determining the relationship between one dependent variable (i.e., the variable whose behavior is to be explained) and two or more independent variables (i.e., the variables explaining the behavior of the dependent variable). For example, we can use this technique to see whether the seriousness or number of times one is infected by a disease is caused by a person’s family history, sex, and age.

²⁸ Flanders, S., “Modeling Court Delay,” *Law & Policy Quarterly*, 2 (1980), 305.

²⁹ Grossman, et al., 1981.

³⁰ Zatz and Lizotte, 1985.

³¹ They also eliminated very involved cases that had voluminous case files and long attorney hours.

³² We say that a case is “censored” if the outcome (event) under study—in this instance, case completion—did not occur or was not observed during the study period.

Although there has been little prior research on case processing times of immigration court cases, the studies of court processing times of other kinds of cases provide general analytical grounding and guidance. They served as helpful building blocks for our current research from different perspectives. By examining various aspects of these studies, such as their research designs, case selection and sampling procedures, measures, and statistical techniques used, we were able to identify several important ways to structure and strengthen this study.

3. The Role of LOP in Case Processing Times: Research Design

In this section, we discuss the methodological procedures used in our research, including which variables were included, how cases were selected, which comparison groups were created, and what analytical strategies were employed.

Variable Selection and Creation

Although analyses conducted in the Phase II study showed that LOP cases had shorter case processing times than non-LOP cases, methodological limitations stood in the way of our being able to argue persuasively that the difference was driven by the LOP. For example, resource limitations at the time prevented us from engaging in more sophisticated analyses that examined other potentially consequential variables, such as charges and immigration judge caseloads. We are now able to control for the effects of many of these variables. Doing so can shed light on whether the observed differences in case processing times are related to the LOP or other factors. In order to isolate the effect of the LOP on case processing times, we needed to identify and measure other variables that are known or believed to influence these times. Our thinking in this regard was shaped by the research reviewed earlier as well as the experience and expertise of our colleagues inside and outside Vera. All variables included in the present analyses were obtained from electronic administrative records maintained and updated by EOIR and program service data collected by LOP service providers, which were integrated by Vera research staff to form unified case files pertaining to individuals whose first Master Calendar Hearing occurred while they were detained.

Our dependent variable—case-processing time—was a count of the number of days from the initial Master Calendar Hearing until the date when a decision was made by an immigration judge before it went to appeal (if applicable).³³ Our pivotal independent (or explanatory) variable, the presence of LOP services, was based on LOP

³³ If a case was concluded at the initial Master Calendar Hearing, that case was assigned a case processing time of one day. Some cases were not completed by the time Vera received the immigration-court data from EOIR. Because they were still open at that time, we did not have a completion date. Technically speaking, these are called “censored” cases. Censored cases provide a lot of information about their risk of completion over time until the censoring date is reached. The kind of statistical technique adopted here, event history analysis, capitalizes on the known characteristics of these cases until censoring occurs. In contrast to the court case-processing studies that omit censored cases, thereby distorting findings, we retained these cases, applying a method that utilizes the available information.

service-delivery information collected from service providers. In addition to these two variables, we considered two groups of variables that might also affect case processing times: (1) the detainee's demographic information (e.g., nationality, language spoken), and (2) case information (e.g., representation, relief sought, custody status, hearing locations, immigration judges, calendar hearing type).^{34 35} Overall, in addition to case processing time and LOP service status, 16 variables were obtained from the merged EOIR and subcontractor data.

Many of the variables are analogous to those examined or otherwise suggested by prior studies. For example, the seriousness of an immigration-court case is most directly reflected by the NTA charge(s) and the type of relief for which a person is eligible.³⁶ Similarly, a defendant's resources in immigration court are largely defined by whether the defendant has representation.³⁷ Previous studies have reported that a defendant's chances of pursuing or receiving relief or other favorable outcomes are related to representation as well as which immigration judge hears a case.^{38 39 40 41}

Unlike other types of courts, the immigration court handles a much more homogeneous group of cases because the inflow of case types and their associated issues are much narrower due to statutory requirements. The majority (99 percent) of cases in our data were involved with removal proceedings and shared many common characteristics, for example, most of them started and ended their cases in detention, did not have representation, and did not apply for relief of any kind. Consequently, the great majority of cases resulted in a removal order.⁴² Moreover, other types of cases such as those in non-removal or stipulated removal proceedings are not targeted to be served by the LOP.⁴³ As a result, variables such as case type (whether a case is in removal proceedings or other proceedings) and case ID (whether a case is in stipulated removals) were not necessary to be included because those cases were excluded from analysis.

³⁴ Appendix 1 lists each variable included in the analysis, how it was created, and whether and why it was recoded from its original format.

³⁵ Number of proceedings and number of NTA charges were originally considered for inclusion in the analyses but later dropped after learning from experts in the field of immigration justice and senior LOP program managers that they were not of practical relevance because of immigration system practices.

³⁶ Hausner and Seidel, 1979.

³⁷ Ibid.

³⁸ Jacobs, J. and Schoenholtz, A., "The State of Asylum Representation: Ideas for Change," *Georgetown Immigration Law Journal*, 16 (2002), 739.

³⁹ Schoenholtz, A., and Bernstein, H., "Improving Immigration Adjudications Through Competent Counsel," *The Georgetown Journal of Legal Ethics*, 21 (2008), 55.

⁴⁰ Schoenholtz, A., Schrag, P. G., and Ramji-Nogales, J., "Refugee Roulette: Disparities in Asylum Adjudication," *Stanford Law Review*, 60 (2007), 295.

⁴¹ Reports by Transactional Records Access Clearinghouse (TRAC): "Judges Show Disparities in Denying Asylum (2006)," <http://trac.syr.edu/immigration/reports/160/>; "Asylum Disparities Persist, Regardless of Court Location and Nationality (2007)," <http://trac.syr.edu/immigration/reports/183/>.

⁴² Our Phase II research found that of all completed cases beginning in detention in 2006, 93 percent ended in detention, 77 percent did not have any relief application, 86 percent had no representation, and 87 percent resulted in removal.

⁴³ Even though the LOP program has been serving detainees in stipulated removals, they are not the targeted population to be served by the program.

Once the variable “presence of LOP services” and the other, 16 independent variables were created, we examined their associations in pairs to make sure that redundant variables were not included. If the association between two variables is very strong, the effect of the one variable on case processing times is equally captured by the other variable and vice versa, making it unnecessary to use both. Most of the variables created for the analysis were categorical, which is to say, the characteristic captured by the variable fell into several categories. For example, there were four categories in the variable of relief applications: (1) no relief application, (2) Voluntary Departure application only, (3) I-589 applications (including cases that involved I-589 applications plus other types of application), and (4) any other applications or combination of applications. Some variables were formulated as limited categorical variables, called “dummy variables.” Dummy variables have only two categories, such as “yes/no” or “true/false.” For the proportional hazards analysis, we needed to create a “censoring” variable that indicated whether a case was completed. Consequently, there was a perfect correlation between the censoring variable and the case-decision variable, which also indicated whether a case was completed. The case-decision variable was, therefore, dropped, leaving 16 independent variables, including the variable “presence of LOP services.” We then examined the statistical association between each of the 120 pairs of variables that could be formed from these 16 variables.^{44 45} No other redundant variable was found.

As part of the study, we consulted with experts in the field of immigration justice and senior LOP program managers preliminarily to assess the substantive relevance of the 16 independent variables with respect to the timing of case completion. The following four variables were not thought to have such relevance because of immigration system practices: (1) number of NTA charges, (2) number of proceedings,⁴⁶ (3) circuit court of the latest hearing location, and (4) days between court input and the initial Master Calendar Hearing. Thus, these four variables were dropped, leaving 12 independent variables.

As our next step, we looked at the pattern in case completion times in each category of cases defined by each of the 12 remaining variables. For example, with regard to the representation variable, we looked at how quickly cases with representation concluded as compared to cases without representation.⁴⁷ This step allowed us to determine whether the patterns in the timing of case completion differed between the categories of represented versus unrepresented cases. If the patterns were very similar,

⁴⁴ See Appendix 2 for detailed information.

⁴⁵ The measure of statistical association used was dictated by how the two variables in a pair were formulated (scaled). For the association between a categorical variable and another categorical variable, including a dummy variable, we looked at the Cramer’s V index. For the association between two dummy variables we looked at the Phi coefficient. An absolute value for both indexes close to or equal to one means a large (strong) or perfect association, respectively; an absolute value close to or equal to zero means a small (weak) or no association, respectively.

⁴⁶ A great majority (over 90 percent) of cases had only one proceeding.

⁴⁷ We generated Kaplan-Meier curves for all the categorical and dummy variables and used Chi-square tests to decide whether there was a difference in case processing times between/among the subgroups of cases defined by the variable.

then the two categories failed to identify differences in the timing of case completion. Whenever a variable fails to present different patterns across its subcategories, that variable can be excluded. Overall, of the 12 non-redundant variables, no variable was excluded based on this strategy, leaving a total of 12 variables for examination in the proportional hazards analysis that we conducted.

We also consulted with experts in the field of immigration justice and LOP program management to see which variables might be combined into interaction variables because of their hypothesized potential joint influence on case processing times. Based on these discussions, we formulated four sets of combinations: (1) custody status *and* LOP status, (2) custody status *and* representation, (3) custody status *and* relief applications, and (4) representation *and* relief applications.^{48 49} The addition of these four sets of interaction variables resulted in a total of 16 independent variables for the analysis, inclusive of the intervention variable, LOP services.

Case Selection

The datasets drawn upon for these analyses were the same as those for the Phase II evaluation. Immigration court records obtained from EOIR were matched with LOP service data collected from service providers. All cases starting in detention (i.e., where the respondent was initially detained following being taken into custody) that had an initial Master Calendar Hearing during the first eight months of 2006 were included.⁵⁰ The final analytical dataset comprised 48,957 cases, 44,054 that were completed at the time we received the data, and 4,903 that were not (i.e., were censored).

Comparison Groups

Cases were divided into three groups: (1) *LOP cases at LOP sites* (8,079 cases: 7,528 completed and 551 not completed), (2) *non-LOP cases at sites not served by the LOP program* (34,615 cases: 30,728 completed and 3,887 not completed), and (3) *non-LOP cases at LOP sites* (6,263 cases: 5,798 completed and 465 not completed). Because it is not clearly known why the third group of 6,263 cases did not receive LOP services, and, moreover, because detainees at LOP sites that did not receive LOP services might still be exposed to legal-rights information from their peers at these sites, which would “contaminate”⁵¹ this group with LOP-relevant information, all 6,263 cases were excluded from comparisons of case processing times between LOP and non-LOP cases.

⁴⁸ The usual interpretation of how interactions between two variables influence case processing times is that the influence of each category of one variable depends (is conditional) upon the influence of each category of the other variable.

⁴⁹ We did not include in the proportional hazard model any independent variables whose values changed over time. This was not by choice but rather was dictated by the fact that no variable in the data available to us captured this variation.

⁵⁰ For detailed information about case selection, see Appendix II of *Legal Orientation Program: Evaluation and Performance and Outcome Measurement Report, Phase II*, http://www.vera.org/publication_pdf/475_874.pdf.

⁵¹ Maxfield, M. G. and Babbie, E., *Research Methods for Criminal Justice and Criminology*, CA: Wadsworth Publishing Company, 1995.

Analysis Strategy

We now summarize the various steps in the statistical analysis, discussing justifications for and how to interpret the statistical computations yielded by them.

The first step was descriptive and exploratory. We wanted to obtain a preliminary picture of how case completion times varied across the different categories of explanatory variables, such as LOP services and representation, before introducing them as independent variables in the proportional hazards analysis. To do this, we used the Kaplan-Meier technique. Using Kaplan Meier procedures, we calculated the rate at which cases concluded each day (i.e., the case completion function). This procedure involves determining (1) the number of cases open (not yet completed) at the start of each day (the denominator) and (2) the number of cases still open (also, not yet completed) at the end of that day (the numerator). These two numbers yield the proportion of cases remaining open each day among all cases *that were open at the start of that day*. These daily proportions are then arrayed on a plot (graph) where the horizontal axis lists consecutive days and the vertical axis lists the proportion of cases still open (“surviving”). This Kaplan Meier plot allows for the straightforward examination of case completion patterns for different categories of cases, for example, LOP cases and non-LOP cases. The generated plots are appropriately called Kaplan-Meier (survival) Curves.

The Kaplan-Meier Curves provide useful summary information, including the widely used median survival time, which is defined as the time at which (i.e., number of days it takes until) 50 percent of the cases are completed. Comparisons of median survival times help pinpoint potentially important procedural influences on these times because it is not as greatly affected as other related measures, for example, the mean, by unusual aspects of case completion times, such as especially long times (outliers). However, the Kaplan Meier technique, although useful for identifying such influences, has the drawback that it does not control for other explanatory influences via their introduction as control variables. This challenge is addressed later in the report.

Once these preliminary, descriptive, and exploratory analyses of individual variables were concluded, we conducted the *proportional hazard* analyses.⁵² The proportional hazards technique is a relatively robust statistical technique⁵³ that calculates a *hazard ratio*, which compares the *odds of an event occurring at any given time* (such as case completion) in different groups, for example, one that receives LOP services and one that does not. One advantage of a hazard ratio is the relative simplicity of its interpretation. A *hazard ratio equal to one* means there is no difference in the timing of

⁵² We selected this technique for several reasons that make it superior to other techniques that might be considered: (1) it is robust, meaning its results can withstand departures from its underlying assumptions including the proportional hazard assumption, (2) by including non-completed cases, it compensates for model-estimation bias that occurs when non-completed cases are excluded from analysis, (3) multiple variables can be examined at the same time (in contrast to the Kaplan Meier method), and (4) results can easily be understood in terms of odds and its equivalent formulation as a probability.

⁵³ Li, Y., Klein, J. P., and Moeschberger, M. L., “Effects of Model Misspecification in Estimating Covariate Effects in Survival Analysis for Small Sample Sizes,” *Computational Statistics & Data Analysis*, 22 (1996), 177.

case completion in the LOP and comparison group because their odds of case completion are identical. A *hazard ratio greater than one* means that case completion occurs *more quickly* in the LOP group than in the comparison group because the odds of case completion are greater for this group. Finally, a *hazard ratio smaller than one* means that case completion occurs *less quickly* in the LOP group than in the comparison group because the odds of case completion are smaller for the LOP group. Phrased differently, the hazard ratio tells us whether the odds of case completion on any given day is higher for LOP cases than for non-LOP cases.

4. Findings

In Phase II of our work, we found that LOP cases were completed on average in 27 days versus 40 days for non-LOP cases, or in *13 fewer days*. We also found that detained LOP participants had shorter average case completion times. This finding appeared for most types of relief applications regardless of representation status. The analyses provided mounting support for the conclusion that LOP services were associated with more rapid case processing. Despite these findings, the analyses were not sufficient to address with confidence the extent to which the observed differences in case processing times were driven by participation in the LOP or by other variables.

Therefore, in the current Phase III, we conducted more sophisticated analyses to address some of the limitations. As we report next, we now have more solid evidence that detained persons who receive LOP services have on average shorter case completion times than detained persons who do not receive LOP services. We now present the supporting findings.

Descriptive and Exploratory Analyses of Case Processing Times of LOP and Non-LOP Cases

As the first step, we plotted Kaplan Meier Curves in order to compare patterns in case completion times for different subsets of cases. Figure 1 shows these patterns in case completion (the vertical Y-axis) as cases advanced procedurally over time (the horizontal X-axis) for LOP cases (the solid, lower curve) and non-LOP cases (the dashed, higher curve).⁵⁴ As one can see, each day, there was a smaller proportion of LOP cases still open than non-LOP cases, as indicated by the lower arc of the LOP curve. This means that for cases beginning at the same time, LOP cases were concluded *earlier* than their non-LOP counterparts.

⁵⁴ A majority of cases were concluded in one day at the initial Master Calendar Hearing—59 percent of the LOP cases and 53 percent of the non-LOP cases. The clustering of so many cases in each group produces virtually identical percentiles in the median survival time computed for the Kaplan Meier Curves. To adjust for this, we excluded all cases completed on day one at the initial Master Calendar Hearing. The Kaplan Meier Curves and accompanying measures of case completion (survival) times were based on *only those cases with case completion times greater than one day*.

Figure 1: Case Completion (Survival) Timing of LOP Cases and Non-LOP Cases

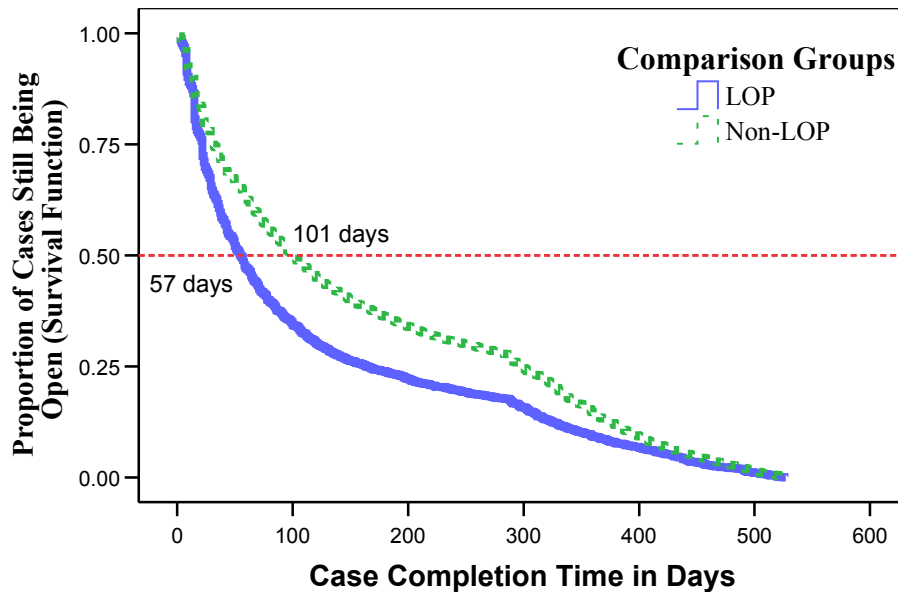


Table 1 below presents detailed information about the differences in case completion times between the LOP and non-LOP cases depicted in Figure 1.⁵⁵ Half of the LOP cases were completed within 57 days (the estimated median case completion [survival] time). In marked contrast, half of the non-LOP cases were completed at a much later time, within 101 days, for a 44-day difference. All such estimates have some give in them.⁵⁶ For this reason, as is common practice, we computed lower and upper estimated median case completion times to yield a range around the original estimated median time. This range is widely known as the confidence interval and is sometimes called the margin of error. In the present context, we computed a 95-percent confidence interval, which means that we are 95 percent sure that the time at which half of LOP cases were concluded fell between 54 and 61 days. Doing a similar computation for the non-LOP cases, we are also 95 percent sure that the time at which half of the non-LOP cases were concluded fell between 99 and 105 days. By extension, we are 95 percent certain that there is a real difference in case completion times between LOP cases and non-LOP cases because the two ranges do not overlap.⁵⁷ This interpretation of the ranges was confirmed

⁵⁵ As the table shows, 3,278 LOP cases had a case completion time of more than one day (i.e., not concluded at the initial Master Calendar Hearing), and, of these, 2,734 of them were completed (544 were not completed, that is, censored). In the non-LOP group, 16,238 cases had a case completion time of more than one day, and, of these, 12,432 of them were completed (3,806 were not completed, that is, censored).

⁵⁶ One such source of give derives from the composition of the cases selected for the estimation. This is known as sampling error.

⁵⁷ An easier example: Based on relevant factors, it is estimated that Child A will reach a full adult height of between 5'3" and 5'4". It is estimated that Child B will reach a full adult height of between 5'7" and 5'9".

by a statistical test of significance.⁵⁸ Overall then, if not completed at the initial Master Calendar Hearing, it took 44 fewer days for half the LOP cases to be completed than non-LOP cases.

Table 1: Summary Data for Cases Depicted in Figure 1:

Differences in Case Completion Times for LOP Cases and Non-LOP Cases

	Estimated Median Case Completion (Survival) Time	Range of Median Case Completion (Survival) Time with 95% Confidence	Total Number of Cases	Completed Cases	Uncompleted Cases
Overall					
LOP Cases	57	54-61	3,278	2,734	544 (17%)
Non-LOP Cases	101	99-105	16,238	12,432	3,806 (23%)
<i>Difference</i>	-44*				

The median case completion (survival) time is the time when 50 percent of cases are concluded.

* This difference is statistically significant at the .05 significance level.

We also looked at just the cases concluded while respondents were detained (detained cases). As Table 2 shows, when we looked at the detained subgroup of cases, LOP cases still took less time than non-LOP cases. Table 2 is formatted just like Table 1 and, therefore, can be interpreted in the same way.⁵⁹ As in the previous analysis, the majority of detained cases were concluded at the initial Master Calendar Hearing and, for similar reasons, were not included in the estimation (68 percent of LOP cases and 66 percent of non-LOP cases).⁶⁰ After excluding those cases, we see that half of LOP cases were concluded within 32 days, whereas half of the non-LOP cases were concluded within 43 days, for a difference of 11 days. As explained before, because the ranges of the two median case completion times do not overlap, we are 95 percent certain that this difference is not a statistical anomaly.

Table 2: Differences in Case Completion Times for Detained LOP Cases and Non-LOP Cases

	Estimated Median Case Completion (Survival) Time	Range of Median Case Completion (Survival) Time with 95% Confidence	Total Number of Cases	Completed Cases	Uncompleted Cases
Detained					
LOP Cases	32	30-35	2,267	2,247	20 (1%)
Non-LOP Cases	43	43-45	9,267	9,024	243 (3%)
<i>Difference</i>	-11*				

The median case completion (survival) time is the time when 50 percent of cases are concluded.

* This difference is statistically significant at the .05 significance level.

Therefore, it is very unlikely that they will have the same height when they grow up because their estimated height ranges do not overlap.

⁵⁸ The statistical test calculated a probability value less than 0.05, indicating that there are firm grounds for inferring that the two median case completion times are in fact different.

⁵⁹ As Table 2 shows, 2,267 LOP cases had a case completion time of more than one day, and, of these, 2,247 were completed (20 were not completed, i.e., censored). In the non-LOP group, 9,267 cases had a case completion time of more than one day, and, of these, 9,024 were completed (243 were not completed, i.e., censored).

⁶⁰ For detained cases, 4,789 LOP cases and 17,752 comparison cases were concluded at the initial Master Calendar Hearing (i.e., having a case time of only one day).

We next looked at case completion times for detained LOP cases and detained non-LOP cases by their representation status and the type of relief application filed (Tables 3 and 4, respectively).^{61 62} As Table 3 shows, for unrepresented detained cases, median LOP case processing times were always less than the corresponding median case processing times for non-LOP cases, regardless of relief application filed. Median LOP case processing times were one to 22 days less than non-LOP median case processing times.⁶³ In the largest group of cases, “no relief applications,” the median case completion time for LOP cases was six days faster than for non-LOP cases.

As Table 4 shows, results were slightly different for represented cases. The differences were somewhat smaller and varied across the type of relief filed. In two comparisons, “no relief applications” and “other applications,” median LOP case processing times were less than non-LOP median case processing times by seven days and two days, respectively (Table 4).⁶⁴

Table 3: Differences in Case Completion Times for Unrepresented Detained LOP Cases and Non-LOP Cases, by Relief Sought

Relief Application Type	Group	Estimated Median Case Completion (Survival) Time	Range of Median Case Completion (Survival) Time with 95% Confidence	Total Number of Cases	Completed Cases	Uncompleted Cases
No Relief Applications	LOP Cases	19	16-22	856	845	11 (1%)
	Non-LOP Cases	25	23-27	3,756	3,632	124 (3%)
	<i>Difference</i>	-6*				
Voluntary Departure Only	LOP Cases	21	17-22	371	370	1 (0%)
	Non-LOP Cases	22	20-22	781	779	2 (0%)
	<i>Difference</i>	-1*				
I-589	LOP Cases	96	85-103	183	178	5 (3%)
	Non-LOP Cases	118	111-126	650	626	24 (4%)
	<i>Difference</i>	-22*				
Other Applications	LOP Cases	77	71-85	279	276	3 (1%)
	Non-LOP Cases	93	85-103	409	386	23 (6%)
	<i>Difference</i>	-16*				

The median case completion (survival) time is the time when 50 percent of cases are concluded.

* This difference is statistically significant at the .05 significance level.

⁶¹ For unrepresented detained cases, if there were no relief application involved, 3,745 (81%) of the LOP cases and 12,455 (77%) of the non-LOP cases were concluded at the initial Master Calendar Hearing. If only an application for Voluntary Departure were involved, 956 (72%) of the LOP cases and 4,685 (86%) of the non-LOP cases were concluded at the initial Master Calendar Hearing. If an I-589 application were involved, 2 (1%) of the LOP cases and 6 (1%) of the non-LOP cases were concluded at the initial Master Calendar Hearing. If other combinations of relief applications were involved, 2 (1%) of the LOP cases and 26 (6%) of the non-LOP cases were concluded at the initial Master Calendar Hearing.

⁶² For represented detained cases, if there were no relief application involved, 52 (17%) of the LOP cases and 339 (19%) of the non-LOP cases were concluded at the initial Master Calendar Hearing. If only an application for Voluntary Departure were involved, 31 (19%) of the LOP cases and 227 (29%) of the non-LOP cases were concluded at the initial Master Calendar Hearing. If an I-589 application were involved, none of the LOP cases and 6 (1%) of the non-LOP cases were concluded at the initial Master Calendar Hearing. If other combinations of relief applications were involved, 1 (1%) of the LOP cases and 8 (1%) of the non-LOP cases were concluded at the initial Master Calendar Hearing.

⁶³ All differences were statistically significant at the 0.05 significance level.

⁶⁴ Both differences were statistically significant at the 0.05 significance level.

Table 4: Differences in Case Completion Times for Represented Detained LOP Cases and Non-LOP Cases, by Relief Sought

Relief Application Type	Group	Estimated Median Case Completion (Survival) Time	Range of Median Case (Survival) Time with 95% Confidence	Total Number of Cases	Completed Cases	Uncompleted Cases
No Relief Applications	LOP Cases	32	29-36	257	257	0
	Non-LOP Cases	39	36-43	1,410	1,363	47 (3%)
	<i>Difference</i>	<i>-7*</i>				
Voluntary Departure Only	LOP Cases	30	28-35	129	129	0
	Non-LOP Cases	28	25-29	568	566	2 (0%)
	<i>Difference</i>	<i>2</i>				
I-589	LOP Cases	122	106-130	73	73	0
	Non-LOP Cases	122.5	118-127	978	961	17 (2%)
	<i>Difference</i>	<i>-0.5</i>				
Other Applications	LOP Cases	87	78-96	119	119	0
	Non-LOP Cases	89	84-93	715	711	4 (1%)
	<i>Difference</i>	<i>-2*</i>				

The median case completion (survival) time is the time when 50 percent of cases are concluded.

* This difference is statistically significant at the .05 significance level.

The findings so far are straightforward and consistent. Under a number of different conditions, LOP cases exhibit more rapid case processing times than non-LOP cases. In the following section, we explore this finding using a more advanced statistical technique.

Statistical Analysis of Case Processing Times of LOP and Non-LOP Cases Controlling for Rival Explanatory Variables

In the above analysis, we observed that detained LOP cases took fewer days than comparison cases for most types of relief applications regardless of representation status. However, the analyses did not take into account other factors that might have influenced the case processing times beyond that of LOP services. Still unresolved is whether the LOP matters with regard to case processing times once these other factors are held constant. In other words, once we expand the analysis to include other factors, will we be able to conclude that the LOP is still responsible for shorter case times? This is addressed by the findings presented below.

Using *proportional hazards*, we examined the effect of the LOP services on case processing times, controlling for the effects of 15 other single and combined variables, such as custody status and representation. Table 5 summarizes the results. The hazard ratio of LOP cases and non-LOP cases is 1.04 (row 1, column 5), after statistically controlling for the effects of the other variables. As explained earlier, because the hazard ratio is greater than one, LOP cases have a higher odds of being completed than non-LOP cases. The hazard ratio of 1.04 specifically indicates that once a person participates in LOP services, the odds of that person's case being completed on a particular day following the initial Master Calendar Hearing are 4 percent higher.⁶⁵ Put differently, if

⁶⁵ To obtain this percentage, one subtracts 1.00 from the hazard ration of 1.04.

one were to look at LOP cases and non-LOP cases that are still open at the start of any given day, the odds are 4 percent greater that LOP cases will be completed that day.⁶⁶

The observed effect of LOP participation on reduced case processing times in the proportional hazards model might, however, be due to the fact that LOP and non-LOP participants differ as to the way in which the LOP affects their choices regarding whether and how to move their cases forward. That is, LOP participants might possess characteristics or have had experiences especially conducive to their facilitating LOP outcomes.⁶⁷ This condition is known as selection bias. These group differences might account for the observed reduction in case processing times in ways having little to do with the LOP itself. One conventional way to protect against the impact of group differences is to use random-assignment procedures because, by doing so, participants entering LOP and non-LOP do so by chance (according to a lottery) rather than for reasons that might relate to LOP outcomes. For practical reasons, random assignment was not an option here. However, there exists a well known and robust strategy for enhancing group overlap known as *propensity scoring*. Basically, propensity scoring controls for the impact of LOP and non-LOP participation on case processing by adjusting for the participants' probabilities of being in the LOP, using their personal characteristics and characteristics related to their cases to do so. Following conventional procedures, we calculated propensity scores for the LOP and non-LOP cases, ordered the scores from lowest to highest, and then divided the scores into five subgroups with equal numbers of cases in each group. The procedure discounts the impact on results of cases for persons who are not likely to be in the LOP and, conversely, increases the impact of cases for persons likely to be in it but who are not.⁶⁸

The adjusted results confirm the earlier finding (Table 5, row 1, column 6). The hazard ratio remains stable at 1.04, providing further evidence that LOP indeed reduces case processing times.

⁶⁶ We also transformed the values of the dependent variable, case processing time, into their logarithms to adjust for the possible influence of unusually large values and used the transformed values to recalculate the proportional hazard ratios. The results were almost identical.

⁶⁷ Appendix 4 shows the ways the LOP and non-LOP groups differ with regard to the 11 independent variables introduced into the proportional hazard regression analyses just reported.

⁶⁸ The procedures are detailed in Appendix 4.

Table 5: Summary of Proportional Hazards Results When Adjusting for Case Selection Bias (N = 42,694)⁶⁹

1	2	3	4	5	6
Variable Set	Variable Type	Variable Number	Variable Name	Hazard Ratio (Unadjusted)	Hazard Ratio (Adjusted)
I	Intervention variable	-	LOP Services	1.04**	1.04*
II	Other Relevant Independent Variables	1	Custody Status		
		2	Representation		
		3	Relief Applications		
		4	In Absentia Order		
		5	Calendar Type		
		6	Starting Hearing Location		
		7	Immigration Judge Caseloads		
		8	Change of Immigration Judge		
		9	Charges		
		10	Nationality Regions		
		11	Languages		
III	Relevant Interaction Variables	12	Custody Status & Representation		
		13	LOP & Custody Status		
		14	Representation & Relief Applications		
		15	Custody Status & Relief Applications		

* This is statistically significant at the .05 significance level.

** This is statistically significant at the .01 significance level.

See Appendix 1 for how each variable was created or recoded if necessary.

In sum, the various analyses established, among other things, that:

- More LOP cases (59 percent) than non-LOP cases (53 percent) were concluded at the initial Master Calendar Hearing; and
- Of the cases that continued after the initial Master Calendar Hearing with the respondent in detention throughout, the median case processing time until the conclusion of LOP cases was 11 days less than the median case processing time for non-LOP cases, a difference confirmed by other, more sophisticated and robust statistical analyses.

Overall, these analyses support the belief that LOP matters in the way commonly thought: the LOP produces faster case processing times. Although the analyses are persuasive in this regard, they are not final. It is possible that other, rival factors not examined here that are associated with LOP *and* with shorter case processing times make it *appear* that the LOP is influential when it is not. Although this scenario is logically and substantively plausible, we and our associates both inside and outside Vera are hard pressed to think of what these factors might be.

There are other issues that still remain besides the need to analyze rival but presently omitted explanatory variables. For example, we need to explore whether our findings persist when other plausible statistical models are used. These technical considerations notwithstanding, given both the suitability and robust nature of the

⁶⁹ For detailed results, see Appendix 4.

statistical methods used in our analysis and the varied factors examined that might have accounted for the shorter case processing times of LOP cases *but which did not*, we conclude with mounting confidence that participation in the LOP has the salutary and desirable effect of decreasing the time necessary to complete a removal case.

Appendix 1: Variables in Phase III

All variables considered in Phase III analyses were obtained from electronic administrative records maintained and updated by the EOIR and program service data collected from LOP service providers, which were integrated by Vera research staff to form unified case files pertaining to detained individuals.

Dependent Variable

Case processing time

This variable indicates the number of days from the date of the initial Master Calendar Hearing (MCH) through the date when a case decision was made by an Immigration Judge before appeal. A case decision can be made on the last hearing date as well as a date later than the last hearing date if an Immigration Judge decides to do so for some reason. The date of the initial MCH was counted as one day. Every case therefore had at least one day of case processing time.

Independent Variables

Censor

Some of the immigration court cases had not been completed at the time we received the data from EOIR. Consequently, we created this censor variable to indicate whether a case was completed or not: “0” means that a case was completed and, thus, not censored, and “1” means that a case was not completed and, therefore, censored.

In addition to the censor variable, we considered the following three sets of independent variables: (I) the intervention variable (LOP services), (II) other relevant variables such as custody status and representation, and (III) interaction variables based on selected variables in II (i.e., “other relevant variables”).

I. Intervention Variable

LOP services

This variable indicates whether a person received LOP services or not. The value for it is either yes (coded “1”) or no (coded “0”).

II. Other Relevant Independent Variables

1. Custody status

Custody status is defined as either released (coded “1”) or detained (coded “0”). Because we studied only those cases starting in detention, all cases had a custody status of “detained” at the initial Master Calendar Hearing (MCH). Therefore, we used the custody status at the last hearing to code this variable.

2. Representation

This variable indicates whether a respondent was represented by a lawyer or accredited representative. Due to the structure of the EOIR ANSIR database, we were not able to identify whether the representation was for a bond hearing, or for the removal proceeding, or both. We were also unable to determine the duration of the representation from the EOIR data, but only whether a respondent was or was not represented at some point in the case. The value for this variable is either yes (coded “1”) or no (coded “0”).

3 Relief applications

We grouped relief applications into four categories: (1) no relief application, (2) Voluntary Departure applications only, (3) I-589 applications (including cases that involved I-589 applications plus other types of application), and (4) any other applications or combination of applications.

4. In absentia order

This variable indicates whether a person was ordered removed in absentia (coded “1”) or not (coded “0”).

5. Calendar type of the last hearing

This variable indicates the type of the last hearing associated with a case: Master Calendar Hearing (MCH) (coded “0”) and individual/merits hearing (coded “1”).

6. Starting hearing location

This variable indicates the court location for the initial Master Calendar Hearing (MCH). We looked at the case frequencies at all hearing locations and grouped all cases into two quantile categories: (1) location with higher volume of cases (i.e., those with more than the median number of cases), and (2) location with lower volume of cases (i.e., those with less than the median number of cases).

7. Immigration judge caseloads at the last hearing location

This variable was created based on the number of cases heard by an Immigration Judge in 2006 at the last hearing court location. Last hearing court location was used because a decision is made at the last hearing location for a case that has been completed. It indicates the size-of-caseload category that an Immigration Judge falls into as compared to other Immigration Judges. We created three quantile categories: (1) first (lowest third), (2) second (mid-range third), and (3) third (highest third).⁷⁰

8. Change of Immigration Judge

This variable indicates whether a case had different Immigration Judges at the initial Master Calendar Hearing (MCH) and the last hearing. We created three categories: (1) same, (2) changed, and (3) status unknown. There are other Immigration Judge-related variables such as years of experience and prior occupation that might be relevant; however, those kinds of information are not available in our data.

9. Charges

This variable indicates the kind of charges associated with a case. We created eight categories: (1) unlawful presence only, (2) unlawful presence and crime, (3) crime only, (4) re-entry only, (5) document fraud only, (6) re-entry and any crime/document fraud, (7) unlawful presence and document fraud, and (8) unknown charges.

⁷⁰ Experts consulted for this study indicated that this variable together with variable 8 accounts for a substantial portion of the effects of immigration judges on case processing times. Although other characteristics of judges may also account for some of the effects on case processing times, these are known to be major contributors.

10. Nationality regions

This variable indicates the geographic region/country of nationality of the person. We grouped cases into eight categories: (1) Mexico, (2) Central America, (3) Caribbean, (4) East Asia, (5) South America, (6) Africa/North Africa/Middle East, (7) Australia/New Zealand/Canada/Europe, and (8) others.

11. Languages

This variable indicates the language that a person spoke. We grouped cases into six categories based on the size of the population that speaks the language(s): (1) Spanish, (2) English, (3) other most widely spoken languages, (4) other widely spoken languages, (5) other languages, and (6) unknown languages.

12. Number of charges

This variable indicates the number of NTA charges associated with a case. We created three categories: (1) one charge, (2) two charges, and (3) three or more charges

13. Proceeding count

This variable was created based on the number of proceedings associated with a case. In its data, EOIR classifies bond hearings as separate proceedings. Likewise, every time a case is granted a change of venue, a new proceeding is opened. We created three categories: (1) one proceeding, (2) two proceedings, and (3) three or more proceedings.

14. Circuit Court of the last hearing location

This variable indicates the circuit court of the area where the last hearing court is located. There are 11 Circuit Courts in the nation that formed the following eleven categories: (1) the First Circuit Court of Appeals... through..., (11) the Eleventh Circuit Court of Appeals.

15. Days between court input and the initial MCH:

This variable was created based on the number of days between court input and the initial Master Calendar Hearing (MCH). It indicates the quantile that a case falls into based on the number of days between court input and the initial MCH compared with other cases. We created three quantile categories: (1) first (lowest third), (2) second (mid-range third), and (3) third (highest third).

16. Case decision

This variable indicates the outcome of a case, i.e., the decision made by an Immigration Judge before appeal. We grouped cases into five categories: (1) relief granted, (2) removal ordered, (3) termination ordered, (4) Voluntary Departure granted, and (5) other decisions.

III. Relevant Interaction Variables

We constructed four interaction variables based on the following independent variables explained above: (1) custody status *and* LOP services, (2) custody status *and* representation, (3) custody status *and* relief applications, and (4) representation *and* relief applications.

Appendix 2: Correlation Matrix for Variables in Phase III

In order to screen for redundant variables, we examined the associations between every pair of independent variables. We present below the correlation matrix for all variables included for consideration in our analysis, with the exception of the censor variable because it does not have substantive relevance. The table lists 16 variables in both the rows and columns. The intersection of a row and column (a cell) indicates which pair of variables is being examined. The absolute values of correlations range between “0” (no correlation) to “1” (perfect correlation). The correlations in the cells on the main diagonal (unshaded) are all 1 because these are the correlations between each variable and itself, which, by definition, comprises a perfect correlation. The cells above the main diagonal (shaded in grey) are empty because they are identical to, and therefore, redundant with, those below the main diagonal. The correlations range between a low of 0.0023 (“Proceeding Count,”—row 14 and “Starting Hearing Location”—column 8), and a high of 0.67 (“Number of Charges”—row 13 and “Charges”—column 10). A common rule of thumb is exclude one of the variables in a pair if their correlation is greater than 0.95. Based on this rule, no variable was excluded or even close to being excluded.

Variables		1	2	3	4	5	6	8	9	7	10	11	12	13	14	15	16
		LOP Services	Custody Status	Representation	Relief Applications	In Absentia Order	Calendar Type	Starting Hearing Location	Immigration Judge Caseloads	Change of Immigration Judge	Charges	Nationality Regions	Languages	Number of Charges	Proceeding Count	Circuit Court of Latest Hearing Location	Days btw Court Input and Initial MCH
1	LOP Services	1															
2	Custody Status	0.09	1														
3	Representation	0.09	0.38	1													
4	Relief Applications	0.10	0.29	0.36	1												
5	In Absentia Order	0.06	0.37	0.02	0.07	1											
6	Calendar Type	0.05	0.29	0.35	0.52	0.03	1										
7	Starting Hearing Location	0.08	-0.03	-0.02	0.05	-0.02	-0.01	1									
8	Immigration Judge Caseloads	0.11	0.45	0.23	0.19	0.19	0.18	0.11	1								
9	Change of Immigration Judge	0.02	0.57	0.28	0.15	0.20	0.20	0.02	0.46	1							
10	Charges	0.13	0.24	0.28	0.26	0.12	0.39	0.07	0.11	0.09	1						
11	Nationality Regions	0.15	0.29	0.31	0.22	0.16	0.21	0.10	0.20	0.10	0.19	1					
12	Languages	0.07	0.23	0.30	0.26	0.03	0.24	0.06	0.16	0.10	0.24	0.39	1				
13	Number of Charges	0.10	0.12	0.01	0.02	0.07	0.03	0.05	0.02	0.04	0.67	0.18	0.13	1			
14	Proceeding Count	0.04	0.58	0.30	0.20	0.23	0.20	0.00	0.29	0.62	0.18	0.14	0.14	0.03	1		
15	Circuit Court of Latest Hearing Location	0.32	0.13	0.22	0.16	0.07	0.10	0.12	0.34	0.09	0.13	0.23	0.13	0.13	0.12	1	
16	Days btw Court Input and Initial MCH	0.12	0.22	0.12	0.15	0.09	0.13	0.13	0.13	0.07	0.16	0.12	0.12	0.08	0.09	0.22	1

Appendix 3: Proportional Hazard Model

The proportional hazards technique calculates a *hazard ratio*, which compares the *probability of an event occurring at any given time* (such as case completion) in different groups, for example, one that receives LOP services and one that does not. One advantage of a hazard ratio is the relative simplicity of its interpretation. A *hazard ratio equal to one* means there is no difference in the timing of case completion in the LOP and comparison group. A *hazard ratio greater than one* means that case completion occurs *more quickly* in the LOP group than in the comparison group. Finally, a *hazard ratio smaller than one* means that case completion occurs *less quickly* in the LOP group than in the comparison group. Phrased differently, the hazard ratio tells us whether the probability of case completion at any given time is higher for LOP cases than for non-LOP cases.

The table below presents the detailed results of the proportional hazard model that was estimated using the Phase III data detailed in Appendix I. Column 1 indexes the three sets of variables considered in the analysis. From the original independent variables we created, including LOP services and the other 16 single independent variables, we excluded (1) the variable “case decision” because it was perfectly correlated with the censoring variable and (2) four variables that were not practically meaningful as discussed in the text of the report.⁷¹ Therefore, besides the censoring variable, we included 12 single independent variables in the proportional hazard model. In addition, we included four interaction independent variables created based on the 12 single independent variables. Column 2 shows the type of independent variables in each of the three sets (I. the intervention variable, LOP; II. other relevant single independent variables, including demographics and case information, and III. relevant interaction variables formulated from selected variables in set II, (i.e., “other relevant variables). Column 3 numerically tracks the variables themselves, from 1 to 15 (“LOP services” was not numbered because it is the only intervention variable in Set I). Column 4 lists the variables by name. Column 5 gives the name of each category (value) of each variable. Column 6 presents the hazard ratio computed for each variable as well as the degree to which the variable is statistically significant.

Each of the 12 variables in set II, from which the additional four variables in set III are created, has one of its categories (values) shaded in grey (see column 5). The shading indicates that that category is the reference point against which the effects on case completion times of the other categories of that variable are being compared. For example, for the intervention variable, LOP Services, “LOP services received” is being compared to the reference category “No LOP services received.” The hazard ratio reported in column 6 is the ratio of the odds of case completion for cases for which “LOP services [were] received” and the odds of case completion for cases for which “No LOP services [were] received.” For variables with more than two categories (values), each of the categories is compared to the reference category, with the hazard ratio formulated just as described above. To illustrate, variable 3, “Relief Application,” comprises four

⁷¹ The four independent variables excluded are: (1) number of NTA charges (variable 13 in the matrix in Appendix 2), (2) proceeding count (variable 14 in the matrix in Appendix 2), (3) circuit court of the latest hearing location (variable 15 in the matrix in Appendix 2), and (4) days between court input and the initial Master Calendar Hearing (MCH) (variable 16 in the matrix in Appendix 2).

categories: (1) No relief application, (2) Voluntary Departure only, (3) Other, and (4) I-589 (reference category). Categories 1 to 3 are each in turn compared to I-589, the reference category. For example, (1) the odds of case completion for cases with “No [relief] application” are compared to the odds of case completion for cases with an “I-589” application; (2) the odds of case completion for cases with “Voluntary Departure only” are compared to the odds of case completion for cases with an “I-589” application; and, (3) the odds of case completion for “Other” cases are compared to the odds of case completion for cases with an “I-589” application.

The table shows that when controlling for the other variables, both individually (variables 1-11) and in interaction (variables 12-15), LOP services still matter with regard to case completion. The hazard ratio for LOP is 1.04 (row 1, column 6), which means that the odds of case completion on a particular day following the initial Master Calendar Hearing are 4 percent higher for cases that receive LOP services than for cases that do not.⁷² In other words, if one were to look at LOP cases and non-LOP cases that are still open at the start of any given day, the odds are 4 percent greater that the LOP cases will be completed that day.

⁷² To obtain this percentage, one subtracts 1.00 from the hazard ratio of 1.04.

1 Variable Set	2 Variable Type	3 Variable Number	4 Variable Name	5 Variable Value Label	6 Hazard Ratio
I	Intervention variable	-	LOP Services	LOP Services Received	1.04**
				No LOP Services Received	(Reference)
		1	Custody Status	Released	0.12***
				Detained	(Reference)
		2	Representation	Represented	1.14**
				Unrepresented	(Reference)
				No Applications	2.88***
		3	Relief Applications	Voluntary Departure Only	3.01***
				Other	1.15**
				I-589	(Reference)
		4	In Absentia Order	Yes	4.17***
				No	(Reference)
		5	Calendar Type	Master Calendar Hearing	1.68***
				Individual Hearing	(Reference)
		6	Starting Hearing Location	Location with High Volume of Cases	1.92***
				Location with Low Volume of Cases	(Reference)
		7	Immigration Judge Caseloads	Low	0.70***
				Medium	0.80***
				High	(Reference)
II	Other Relevant Independent Variables	8	Change of Immigration Judge	Same	1.84***
				Status Unknown	0.15**
				Changed	(Reference)
				Unlawful Presence Only	1.36***
				Unlawful Presence and Crime	1.20***
				Re-Entry and Any Crime/Doc Fraud	1.35***
				Re-Entry Only	1.39***
		9	Charges	Document Fraud Only	1.18***
				Unlawful Presence and Document Fraud	1.18***
				Unkown Charges	0.52**
				Crime Only	(Reference)
				Mexico	0.97
				Central America	0.84***
				Caribbean	0.83***
				Far East	1.06
		10	Nationality Regions	South America	0.95
				Africa/North Africa and Mid-East	0.90*
				Australia/New Zealand/Canada/European	1.05
				Other	(Reference)
III	Relevant Interaction Variables			Spanish	1.37***
				English	1.10*
				Other Most Widely Spoken Languages	1.08
				Other Widely Spoken Languages	1.04
				Unknown Languages	1.62***
				Other Languages	(Reference)
		12	Custody Status and Representation	Released and Represented	1.71***
		13	LOP and Custody Status	LOP and Released	0.89*
		14	Representation and Relief Applications	Represented and No Relief Application	0.47***
				Represented and Voluntary Departure Only	0.56***
				Represented and Other Types of Application	0.95
		15	Custody Status and Relief Applications	Released and No Relief Application	0.66***
				Released and Voluntary Departure Only	1.91***
				Released and Other Types of Application	1.20**

A total of 42,694 cases were used for the analysis.

The category shaded in grey is the reference category.

* The hazard ratio is statistically significant at 0.05 significance level;

** The hazard ratio is statistically significant at 0.01 significance level;

*** The hazard ratio is statistically significant at 0.001 significance level.

Appendix 4: Propensity Score Stratification Method

It was not possible to randomly assign detainees to the LOP (intervention) and non-LOP (control) groups. Had that been possible, it would have promoted the comparability of the two groups, thereby ensuring the internal validity of the analyses, and, in turn, enabling us to better gauge the degree to which the LOP influenced case processing times independent of other factors. Without the advantages of random assignment, the two groups might in fact differ in ways relevant to case processing time, obscuring the clarity of the findings. The table below compares the characteristics of LOP and non-LOP groups across the various participant and case characteristics examined in the analyses. The groups indeed exhibit some divergence, most prominently with regard to Representation, Immigration Judge Caseloads, Charges, Nationality Regions, and Languages.

Variable Name	Variable Value Label	LOP (N=8,079)	Comparison (N=34,615)
		%	%
Custody Status	Detained	87.3	78.1
	Released	12.7	21.9
Representation	Represented	86.0	75.3
	Not Represented	14.0	24.7
Relief Applications	No Application	68.4	63.3
	Voluntary Departure Only	19.5	20.2
	I-589	5.3	10.2
	Other	6.8	6.4
In Absentia Order	No	97.4	95.5
	Yes	2.6	4.5
Calendar Type	Master Calendar Hearing	85.4	82.3
	Individual Hearing	14.6	17.2
Starting Hearing Location	Location with Low Volume of Cases	0.1	2.4
	Location with High Volume of Cases	99.9	97.6
Immigration Judge Caseloads	Low	1.4	4.6
	Medium	7.3	19.2
	High	91.3	76.2
Change of Immigration Judge	Same	89.2	87.6
	Changed	10.7	12.4
	Status Unknown	<0.1	<0.1
Charges	Unlawful Presence Only	67.6	50.6
	Unlawful Presence & Crime	9.2	10.4
	Re-Entry & Any Crime/Doc Fraud	0.6	2.4
	Crime Only	17.0	23.9
	Re-Entry Only	3.6	4.3
	Doc Fraud Only	1.4	5.8
	Unlawful Presence & Doc Fraud	0.5	2.5
	Unkown Charges	0.1	0.1
Nationality Regions	Mexico	67.6	49.9
	Central America	23.1	21.3
	Caribbean	0.9	10.2
	Far East	2.7	4.7
	South America	1.6	4.8
	Africa/North Africa and Mid-East	1.9	4.2
	Australia/New Zealand/Canada/European	1.5	2.9
	Others	0.8	2.0
Languages	Spanish	82.4	72.1
	English	14.5	19.3
	Other Most Widely Spoken Languages	1.0	3.8
	Other Widely Spoken Languages	0.6	1.6
	Other Languages	1.2	3.0
	Unknown languages	0.2	0.4

In order to adjust for these group differences, we used propensity score *stratification* (sub-classification). This approach involves calculating a propensity score for each subject, whether in the LOP group or not, which represents the subject's probability of being in the LOP group. The propensity scores are ordered from lowest to highest and divided into five groups of equal size (quintiles). The propensity score subgroups are then entered into the proportional hazard model along with the other single and combined variables. Basically, the lower the propensity scores, the less the influence

of non-LOP cases on the proportional hazards model, whereas the higher the propensity score, the greater the influence.

The following specific procedures were followed to calculate the propensity scores and introduce them into the proportional hazard model reported in Appendix 3.⁷³⁷⁴

1. A logistic regression model was estimated to calculate the propensity scores, using group membership (whether a case was in the LOP group or not) as the dependent variable and the 14 single and combined variables as predictors of group membership;⁷⁵
2. The propensity scores were ordered from lowest to highest and then grouped into quintiles (strata/sub-classes);
3. The propensity score quintiles were introduced as variables into the proportional hazard model.

After adjusting for group differences, the hazard ratio for the LOP variable remained the same, 1.04 (see the table below: compare row 1, column 6 to row 1, column 7), which, as described earlier, means that the odds of case completion on a particular day following the initial Master Calendar Hearing are 4 percent higher for cases that receive LOP services than for cases that do not.

⁷³ Leslie, S. and Ghomrawi, H. (2008). The Use of Propensity Scores and Instrumental Variable Methods to Adjust For Treatment Selection Bias. SAS Institute.

⁷⁴ Doagostino, R. B., Jr. (1998). Tutorial in Biostatistics: Propensity Score Methods for Bias Reduction in the Comparison of a Treatment to a Non-Randomized Control Group. *Statistics in Medicine*, 17, 2265.

⁷⁵ The variable for the interaction between LOP services and custody status was not included because LOP services was the dependent variable in the logistic regression model.

1	2	3	4	5	6	7
Variable Set	Variable Type	Variable Number	Variable Name	Variable Value Label	Hazard Ratio (Unadjusted)	Hazard Ratio (Adjusted)
I	Intervention variable	-	LOP Services	LOP Services Received	1.04**	1.04*
				No LOP Services Received	(Reference)	
		1	Custody Status	Released	0.12***	0.12***
				Detained	(Reference)	
		2	Representation	Represented	1.14**	1.20*
				Unrepresented	(Reference)	
		3	Relief Applications	No Applications	2.88***	2.85***
				Voluntary Departure Only	3.01***	2.92***
				Other	1.15**	1.14**
				I-589	(Reference)	
		4	In Absentia Order	Yes	4.17***	4.26***
				No	(Reference)	
		5	Calendar Type	Master Calendar Hearing	1.68***	1.76***
				Individual Hearing	(Reference)	
		6	Starting Hearing Location	Location with High Volume of Cases	1.92***	1.79***
				Location with Low Volume of Cases	(Reference)	
		7	Immigration Judge Caseloads	Low	0.70***	0.79***
				Medium	0.80***	0.87***
				High	(Reference)	
		8	Change of Immigration Judge	Same	1.84***	1.97***
				Status Unknown	0.15**	0.19*
				Changed	(Reference)	
	Other Relevant Independent Variables	9	Charges	Unlawful Presence Only	1.36***	1.28***
				Unlawful Presence and Crime	1.20***	1.18***
				Re-Entry and Any Crime/Doc Fraud	1.35***	1.35***
				Re-Entry Only	1.39***	1.45***
				Document Fraud Only	1.18***	1.22***
				Unlawful Presence and Document Fraud	1.18***	1.24***
				Unkown Charges	0.52**	0.55**
				Crime Only	(Reference)	
		10	Nationality Regions	Mexico	0.97	0.88*
				Central America	0.84***	0.76***
				Caribbean	0.83***	0.78***
				Far East	1.06	1.00
				South America	0.95	0.91
				Africa/North Africa and Mid-East	0.90*	0.88*
				Australia/New Zealand/Canada/European	1.05	1.04
				Other	(Reference)	
		11	Languages	Spanish	1.37***	1.38***
				English	1.10*	1.10*
				Other Most Widely Spoken Languages	1.08	1.09
				Other Widely Spoken Languages	1.04	1.04
				Unknown Languages	1.62***	1.63***
				Other Languages	(Reference)	
III	Relevant Interaction Variables	12	Custody Status and Representation	Released and Represented	1.71***	1.69***
		13	LOP and Custody Status	LOP and Released	0.89*	0.88*
		14	Representation and Relief Applications	Represented and No Relief Application	0.47***	0.46***
				Represented and Voluntary Departure Only	0.56***	0.56***
				Represented and Other Types of Application	0.95	0.94
		15	Custody Status and Relief Applications	Released and No Relief Application	0.66***	0.65***
				Released and Voluntary Departure Only	1.91***	1.92***
				Released and Other Types of Application	1.20**	1.22**

A total of 42,694 cases were used for the analysis.

* This is statistically significant at the .05 significance level.

** This is statistically significant at the .01 significance level.

*** This is statistically significant at the .001 significance level.